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THE SARS EPIDEMIC AND ITS AFTERMATH IN CHINA: A POLITICAL PERSPECTIVE

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In November 2002, a form of atypical pneumonia called severe acute respiratory syndrome (SARS) began spreading rapidly around the world, prompting the World Health Organization (WHO) to declare the ailment "a worldwide health threat." At the epicenter of the outbreak was China, where the outbreak of SARS infected more than 5,300 people and killed 349 nationwide (Ministry of Health, 2003). History is full of ironies: the epidemic caught China, at first, unprepared to defeat the disease 45 years after Mao Zedong bade "Farewell to the God of Plagues."

The SARS epidemic was not simply a public health problem. Indeed, it caused the most severe socio-political crisis for the Chinese leadership since the 1989 Tiananmen crackdown. Outbreak of the disease fueled fears among economists that China's economy was headed for a serious downturn. A fatal period of hesitation regarding information-sharing and action spawned anxiety, panic, and rumor-mongering across the country and undermined the government's efforts to create a milder image of itself in the international arena. As Premier Wen Jiabao pointed out in a cabinet meeting on the epidemic, "the health and security of the people, overall state of reform, development, and stability, and China's national interest and international image are at stake (Zhongguo xinwen wang, 2003a)." In the weeks that followed, the Chinese government launched a crusade against SARS, effectively bringing the disease under control in late June and eliminating all known cases by mid-August.

While clearly a test for the public health infrastructure of China, the course of the epidemic also raised crucial questions about the capacity and dynamics of the Chinese political structure and its ability to address future outbreaks. What accounted for the initial government decisions to withhold

information from the public and take little action against the disease, and then the subsequent dramatic shift in government policy toward SARS? Why was the government able to contain the spread of SARS in a relatively short period? What lessons has the government drawn from the crisis? A political analysis of the crisis not only demonstrates crucial linkages between China's political system and its pattern of crisis management but also sheds light on the government's ability to handle the next disease outbreak. While problems in the formal institutional structure and bureaucratic capacity accounted for the initial official denial and inaction, the institutional forces unleashed from the terrain of state-society relations led to dramatic changes in the form and content of government policy toward SARS. Through mass mobilization, the government successfully brought the disease under control. While these developments are encouraging, China's capacity to effectively prevent and contain future infectious disease outbreaks remains uncertain. Prevention and control programs are still troubled by problems in agenda-setting, policy making, and implementation which, in turn, can be attributed to its political system. A healthier China therefore demands some fundamental changes in the political system.

The Making of a Crisis

With hindsight, China's health system seemed initially to respond relatively well to the emergence of the illness. The earliest case of SARS is thought to have occurred in Foshan, a city southwest of Guangzhou in Guangdong province, in mid-November 2002. It was later also found in Heyuan and Zhongshan in Guangdong. This "strange disease" alerted Chinese health personnel as early as mid-December. On January 2, a team of health experts was sent to Heyuan and diagnosed the disease as an infection caused by a certain virus (Hai and Hua, 2003). A Chinese physician, who was in charge of treating a patient from Heyuan in a hospital in Guangzhou, quickly reported the disease to a local anti-epidemic station (Renmin ribao, 2003a). We have reason to believe that the local anti-epidemic station alerted the provincial health bureau about the disease, with the bureau in turn reporting to the provincial government and the Ministry of Health shortly afterwards, since the first team of experts sent by the Ministry arrived at Guangzhou on January 20, and the new provincial government (who took over on January 20) ordered an investigation of the disease almost at the same time (Renmin wang, 2003a). A combined team of health experts from the Ministry and the

province was dispatched to Zhongshan and completed an investigation report on the unknown disease. On January 27, the report was sent to the provincial health bureau and, presumably, to the Ministry of Health in Beijing. The report was marked "top secret," which meant that only top provincial health officials could open it.

Further government reaction to the emerging disease, however, was delayed by the problems of information flow within the Chinese hierarchy. For 3 days, there were no authorized provincial health officials available to open the document. After the document was finally read, the provincial bureau distributed a bulletin to hospitals across the province. However, few health workers were alerted by the bulletin because most were on vacation for the Chinese New Year (Pomfret, 2003a). In the meantime, the public was kept uninformed about the disease. According to the Implementing Regulations on the State Secrets Law regarding the handling of public health–related information, any occurrence of infectious diseases should be classified as a state secret before they are "announced by the Ministry of Health or organs authorized by the Ministry." In other words, until such time as the Ministry chose to make information about the disease public, any physician or journalist who reported on the disease would risk being persecuted for leaking state secrets (Li et al., 1999). A virtual news blackout about SARS thus continued well into February.

The initial failure to inform the public heightened anxieties, fear, and widespread speculation. On February 8, reports about a "deadly flu" began to be sent via short messages on mobile phones in Guangzhou. In the evening, words like bird flu and anthrax started to appear on some local Internet sites (South China Morning Post, 2003). On February 10, a circular appeared in the local media that acknowledged the presence of the disease and listed some preventive measures, including improving ventilation, using vinegar fumes to disinfect the air, and washing hands frequently. Responding to the advice, residents in Guangzhou and other cities cleared pharmacy shelves of antibiotics and flu medication. In some cities, even the vinegar was sold out. The panic spread quickly in Guangdong, and was felt even in other provinces.

On February 11, Guangdong health officials finally broke the silence by holding press conferences about the disease. The provincial health officials reported a total of 305 atypical pneumonia cases in the province. The officials also admitted that there were no effective drugs to treat the disease

and that the outbreak was only tentatively contained (Nanfang zhoumu, 2003). From then on, information about the disease was reported to the public through the news media. Yet in the meantime, the government played down the risk of the illness. Guangzhou city government on February 11 went so far as to announce the illness was "comprehensively" under effective control (Renmin wang, 2003b). As a result, while the panic was temporarily allayed, the public also lost vigilance about the disease. When some reports began to question the government's handling of the outbreak, the provincial propaganda bureau again halted reporting on the disease on February 23. This news blackout continued during the run-up to the National People's Congress in March, and government authorities shared little information with the World Health Organization until early April.

The continuing news blackout not only restricted the flow of information to the public but contributed to the government's failure to take further actions to address the looming catastrophe. Here it is worth noting that the Law on Prevention and Treatment of Infectious Diseases (enacted in September 1989) contains a number of significant loopholes. First, provincial governments are obliged to publicize epidemics in a timely and accurate manner only after being authorized by the Ministry of Health (Article 23). Second, atypical pneumonia was not listed in the law as an infectious disease under surveillance, and thus local government officials legally were not accountable for reporting the disease. While the law allows for the addition of new items to the list, it does not specify the procedures through which new diseases can be added. Both of these factors provided disincentives for the government to effectively respond to the crisis. In fact, the Chinese Center for Disease Control and Prevention did not issue a nationwide bulletin to hospitals on how to prevent the ailment from spreading until April 3, and it was not until mid-April that the government formally listed SARS as a disease to be closely monitored and reported on a daily basis under the Law of Prevention and Treatment of Infectious Diseases.

Evidence also indicates that the provincial government, in deciding whether to publicize the event, considered not only the public health implications of the outbreak, but also the effect such information might have on local economic development (Garrett, 2003; Pomfret, 2003a). In part, this correlates with a significant shift in China's national agenda, which makes economic growth the key to solving the nation's problems and makes social stability the prerequisite to development (Development, 2000). In the words of the late paramount leader Deng Xiaoping, "the overwhelmingly important

issue for China is stability, without which nothing can be achieved (Renmin Rabao, 2001)." Such concerns were only complicated by the fact that during some of the most crucial period of the disease outbreak, party elites were busy preparing for the National People's Congress (NPC) in March, which would mark the beginning of a new government (following the selection of new leaders to the Politburo Standing Committee in November). To publicly acknowledge the outbreak at this critical juncture might have risked not only causing socioeconomic instability but sullying the party's image among the people.

In fairness here, it should be noted that officials in any nation or region of the world would likely face a similar dilemma in attempting to consider its obligations to protect the public's health while at the same time considering how to maintain equally important aspects of social stability and economic development. In addition, the media blackout and the government's slow response were not the sole factors leading to the crisis. With little knowledge about the true cause of the disease and its rate and modes of transmission, the top-secret document submitted to the provincial health bureau did not even mention that the disease showed signs of being considerably contagious. Neither did it call for rigorous preventive measures, which may explain why by the end of February, nearly half of Guangzhou's 900 cases were health care workers (Pomfret, 2003a). Indeed, even countries like Canada were having difficulty controlling SARS. In this sense, SARS is a natural disaster, not a humanmade one.

Nevertheless, there is no doubt that government inaction paralleled by the absence of an effective response to the initial outbreak resulted in a crisis. To begin with, the security designation for the top-secret document meant that Guangdong health authorities could not discuss the situation with other provincial health departments in China. Consequently, hospitals and medical personnel in most localities were completely unprepared for the outbreak. When the first SARS case in northern China was admitted to the PLA 301 Hospital in Beijing on March 2, doctors in charge of the treatment had little information about the disease (Zhongguo qingnian bao, 2003). Even as the traffic through emergency rooms began to escalate, major hospitals in Beijing took few measures to reduce the chances of cross-infection. Likewise, Inner Mongolia's first SARS patient, who sought treatment in the Hohhot Hospital around March 20, was not correctly diagnosed until early April (Kahn and Rosenthal, 2003). The security designation of the Guangdong report also prevented health authorities in neighboring Hong

Kong from receiving information about the disease, and consequently they were denied the knowledge they needed to prepare (Pomfret, 2003a). Soon after, the illness developed into an epidemic in Hong Kong, which proved to be a major international transit route for SARS.

Beyond Guangdong: The Ministry of Health and Beijing

The Ministry of Health learned about SARS in January and informed WHO and provincial health bureaus about the outbreak in Guangdong around February 7, and yet no further action was taken. It is safe to assume that Zhang Wenkang, the health minister, brought the disease to the attention of Wang Zhongyu (secretary general of the State Council) and Li Lanqing (the vice premier in charge of public health and education). We do not know what happened during this period of time, but it is likely that the leaders were so preoccupied preparing for the National People's Congress that no explicit directive was issued from the top until April 2. By March 1, the epidemic was raging in Beijing. For fear of disturbance during the NPC meeting, however, city authorities kept information about its scope not only from the public but also from the Party Center. According to Dr. Jiang Yanyong, medical staff in Beijing's military hospitals were briefed about the dangers of SARS in early March, but were told not to publicize what they had learned lest it interfere with the NPC meeting (Jakes, 2003). Similar communication obstacles hampered cooperation between China and the World Health Organization. WHO experts were invited to China by the Ministry of Health but were not allowed to have access to Guangdong until April 2, 8 days after their arrival. It was not until April 9 that they were allowed to inspect military hospitals in Beijing.

Such obstructions to information flow and the lack of interdepartmental cooperation during the crisis provide a reference point for the "fragmented authoritarianism" model of the Chinese political system, which posits that authority below the very peak of the Chinese system is fragmented and disjointed, leading to a bogged-down policy process which is characterized by extensive bargaining (Lampton, 1987; Lieberthal and Lampton, 1992). While this model offers only a static description of how the core state apparatus works (Oksenberg, 2001), it correctly points out the coordination problems in China's policy process. Medical personnel in the city of Guangzhou blamed poor communication between the province's health bureau and the city's health authorities for the failure to control the spread of the disease (Pomfret, 2003a). In addition to the tensions among different

levels of health authorities, coordination problems existed between functional departments and territorial governments, as well as between civilian and military institutions. As one senior health official admitted, before anything could be done, the Ministry of Health had to negotiate with other ministries and government departments (Pomfret, 2003b). In the public health domain, territorial governments like Beijing and Guangdong maintain primary leadership over the provincial health bureau, with the former determining the size, personnel, and funding of the latter. This constitutes a major problem for the Ministry of Health, which is bureaucratically weak, not to mention that its minister is just an ordinary member of the Chinese Communist Party (CCP) Central Committee and not represented in the powerful Politburo. A major policy initiative from the Ministry of Health, even issued in the form of a central document, is mainly a guidance document (*zhidao xin wenjian*) that has less binding power than one that is issued by territorial governments. Whether it will be honored hinges on the "acquiescence" (*liangjie*) of the territorial governments. This helps explain the continuous lack of effective response by Beijing city authorities until April 17 (when an anti-SARS joint team was established).

At one level, Beijing's municipal government apparently believed that it could handle the situation by itself and thus refused assistance from the Ministry of Health. At another, the Ministry did not have control over all available health facilities. Of Beijing's 175 hospitals, 16 are under the control of the army, which maintains a relatively independent health system. Having admitted a large number of SARS patients, military hospitals in Beijing withheld SARS statistics from the Ministry until mid-April. Organizational barriers also delayed the process of correctly identifying the cause of the disease. According to government regulations, only the Chinese CDC is the legal holder of virus samples. As a result, researchers affiliated with other government organizations had been to Guangdong many times in search of virus samples and returned empty handed (Chinese Scientists, 2003). In addition, even the Chinese CDC in Beijing had to negotiate with local disease-control centers to obtain the samples (Garrett, 2003). After an examination of just two available samples, its chief virologist rushed to announce chlamydia as the etiological agent of SARS on February 18 (Huailing, 2003).

The presence of such a fragmented and disjointed bureaucracy within an authoritarian political structure means that policy immobility can only be overcome with the intervention of an upper-level government that has the

authority to aggregate conflicting interests. However, this tends to encourage lower-level governments to shift their policy overload to the upper levels in order to avoid assuming responsibilities. As a consequence, a large number of agenda items compete for the upper level government's attention. In addition, the drive toward economic growth in the post-Mao era has marginalized public health issues (Ruan, 1992). Compared to economic issues, a public health problem often needs an attention-focusing event (e.g., a large-scale outbreak of a contagious disease) to be finally recognized, defined, and formally addressed (Kingdon, 1995). Not surprisingly, SARS did not raise the eyebrows of top decision makers until it had developed into a nationwide epidemic.

By early April, it was evident that SARS was being taken very seriously at the top level. Yet the government's ability to formulate a sound policy against SARS was hampered as lower-level government officials intercepted and distorted the upward information flow. For fear that any mishap reported in their jurisdiction might be used as an excuse to pass them over for promotion, government officials at all levels tended to distort the information they pass up to their political masters in order to place themselves in a good light. While this is not unique to China, the problem is alleviated in democracies through "decentralized oversight," which enables citizen interest groups to check up on administrative actions. Because the general public in China is not enfranchised to oversee the activities of government agencies, however, lower-level officials can fool higher authorities more easily than their counterparts in liberal democracies (Shirk, 1993). This exacerbates the information asymmetry problems inherent in a hierarchical structure. Beijing municipal authorities, for example, kept hiding the actual SARS situation in the city from the Party Center until April. Initial deception by lower-level officials in turn led the central leaders to misjudge the situation. On April 2, Premier Wen Jiabao chaired an executive meeting of the State Council to discuss SARS prevention and control. Based on the briefing given by the Ministry of Health, the meeting declared that SARS had "already been brought under effective control."

The growing dispersal of political power at the highest level in the post-Mao era further reduced the autonomy of the top leaders in responding to the crisis in a timely manner. Instead of having a personalized leadership unconstrained by laws and procedures, the post-Mao regime features collective leadership, with the Party general secretary acting as the first among equals. Political power at the national level has been further diluted

since the 16th Party Congress, which expanded the membership of the Politburo Standing Committee and allowed former president Jiang Zemin (who is not a member of the CCP Central Committee) to retain the position of Chairman of the Central Military Commission. Because China's decision making emphasizes consensus, the involvement of more actors with equal status in decision making only increases the time and effort needed for policy coordination and compromise.

The Government Crusade Against SARS

As the virus continued to spread, China's political leadership came under growing domestic and international pressures (Pomfret, 2003d). Despite the prohibition against public discussion of the epidemic, 40.9 percent of the urban residents had already heard about the disease through unofficial means (Haiyan, 2003). As mentioned above, news of the disease reached residents in Guangzhou through mobile-phone text messages in early February, forcing the provincial government to hold a news conference admitting to the outbreak. Starting on February 11, the Western news media began to aggressively report on SARS in China and the government's cover-up of the outbreak. On March 15, the WHO issued its first global warning about SARS. While China's government-controlled media was prohibited from reporting on the warning, the news circulated via mobile phones, e-mail, and the Internet. On March 25, 3 days after the arrival of a team of WHO experts, the government for the first time acknowledged the spread of SARS outside of Guangdong. The State Council held its first meeting to discuss the SARS problem 2 days after the *Wall Street Journal* published an editorial calling for other countries to suspend all travel links with China until it implemented a transparent public health campaign. The same day, the WHO issued the first travel advisory in its 55-year history advising people not to visit Hong Kong and Guangdong, prompting Beijing to hold a news conference in which the health minister promised that China was safe and SARS was under control. Enraged by the minister's false account, Dr. Jiang Yanyong, a retired surgeon at Beijing's 301 military hospital, sent an e-mail to two TV stations, accusing the minister of lying. While neither station followed up on the e-mail, *Time* magazine picked up the story and posted it on its website on April 9, which triggered a political earthquake in Beijing.

The aforementioned events are revealing examples of how evolving state-society relations can significantly influence the trajectory of public policy development in post-Mao China. Economic reform and globalization

provide more Chinese with the information, connections, resources and incentives to act on their own for their personal security and personal fulfillment. In the words of Thomas Friedman, these empowered, even superpowered individuals become more demanding of the government and will get angry when their leaders fail to meet their aspirations (Friedman, 2000). The torrent of messages sent through cell phones or the Internet and Dr. Jiang Yanyong's exposure of the cover-up thus challenged the state's monopoly on information. Furthermore, while party leaders are not formally accountable to their people, they may have to take into account mass reactions of the population when they make policies, or otherwise risk a lack of cooperation with their programs from below. As a result of the strategic interaction between the state with increasing legitimacy concerns and social forces with more political and economic resources, the state may have more incentives to take seriously the people's interests and demands (Huang, forthcoming).

The growing epidemic, combined with pressures from inside and outside the country, ultimately engendered a strong and effective action by the government to contain the disease and end the crisis. On April 2, the State Council held a meeting to discuss the SARS problem, the first of three meetings held within the space of a month. This was followed by an urgent meeting of the Standing Committee of the CCP Politburo on April 17. Meanwhile, the government also showed a new level of candor. Premier Wen Jiabao on April 13 said that although progress had been made, "the overall situation remains grave" (Business Week, 2003). In hindsight, one of the strengths of party-state dualism in China is the Party's ability to push the government by signaling its priorities loudly and clearly. This helps explain why the April 2 meeting held by the State Council did not generate any serious response from the lower level, whereas the system was fully mobilized after April 17, when the Politburo's Standing Committee explicitly warned against covering up SARS cases and demanded accurate and timely reporting of the disease. After the April 17 meeting, government media began to publicize the number of SARS cases in each province, updating on a daily basis. An order from the Ministry of Health formally listed SARS as a disease to be monitored under the Law of Prevention and Treatment of Infectious Diseases and made it clear that every provincial unit should report the number of SARS cases on a given day by 12 noon on the following date. The party and government leaders around the country were

now to be held accountable for the overall SARS situation in their jurisdictions.

On April 20, Health Minister Zhang Wenkang and Beijing mayor Meng Xuenong were ousted for their mismanagement of the crisis. While they were not the first ministerial-level officials since 1949 to be dismissed mid-crisis on a policy matter, the case was a signal of political innovation from China's new leadership. As an article in *The Economist* remarked, the unfolding of the event—minister presides over policy bungle; bungle is exposed and there is public outcry; minister resigns to take the rap—"almost looks like the way that politics works in a democratic, accountable country" (China's Chernobyl, 2003). The crisis also led the government to take measures to strengthen fundamental authority links within the system. As part of a nationwide mobilization campaign, the State Council sent out inspection teams to 26 provinces to scour government records for unreported cases and to fire officials for lax prevention efforts. According to the official media, by May 8 China had fired or penalized more than 120 officials for their "slack" response to the SARS epidemic (Tak-ho, 2003). It was estimated that by the end of May, nearly 1,000 government officials had been disciplined for the same reason (Lianhe zaobao, 2003). These actions shook the complacency of local government officials, who then abandoned their initial hesitation and jumped onto the anti-SARS bandwagon. Driven by political zeal, they sealed off villages, apartment complexes, and university campuses, quarantined tens of thousands of people, and set up checkpoints to take temperatures. By May 7, 18,000 people had been quarantined in Beijing. The Maoist "Patriotic Hygiene Campaign" was revitalized. In Guangdong, 80 million people were mobilized to clean houses and streets (Renmin ribao, 2003b). In the countryside, virtually every village was on SARS alert, with roadside booths installed to examine all those who entered or left.

The crisis also improved interdepartmental and interagency coordination and speeded up the process of institutionalizing China's emergency response system to be able to handle public health contingencies. On April 17, an anti-SARS joint team was created for the city of Beijing, which included leading members from the Ministry of Health and the military (Xinhua News, 2003a). On April 23, a task force known as the SARS Control and Prevention Headquarters of the State Council was established to coordinate national efforts to combat the disease. Vice Premier Wu Yi was appointed as commander-in-chief of the task force, and similar arrangements were made

at the provincial, city, and county levels. On May 12, China issued a set of Regulations on Public Health Emergencies. According to these regulations, the State Council shall set up an emergency headquarters to deal with any public health emergencies, which are referred to as serious epidemics, widespread unidentified diseases, mass food and industrial poisoning, and other serious public health threats (Xinhua News, 2003b).

Direct involvement of the political leadership also increased program resources and mobilized resources from other systems. On April 23, a national fund of 2 billion *yuan* ($US 250 million) was created for SARS prevention and control. The fund was to be used to upgrade county-level hospitals, to finance the treatment of farmers and poor urban residents infected with SARS, and to purchase SARS-related medical facilities in central and western China. This central government funding was complemented by an additional 7 billion *yuan* ($US 875 million) from local governments (Renmin wang, 2003c). Free treatment was offered to SARS sufferers anywhere in the country.

These momentous measures appeared to have worked. The epidemic started to lose its momentum in late May, and on June 24, the World Health Organization lifted its advisory against travel to Beijing. On August 16, with the last two SARS patients discharged from the Beijing Ditan Hospital, China for the time being was free from SARS.

Improvements Resulting from the SARS Crisis

The weaknesses and strengths demonstrated by the government during the crisis raised questions regarding its capacity to respond to other disease outbreaks. With the SARS outbreak wreaking havoc and shaving an estimated seven-tenths of a percentage point off China's gross domestic product for 2003, the government appears to have drawn some important lessons from the crisis, including the need for coordinated development. When interviewed by the executive editor of the *Washington Post*, Premier Wen Jiabao said that "one important inspirational lesson" the new Chinese leadership learned from the SARS crisis was that "un-even development between the urban and rural areas, and imbalance between economic development and social progress" were "bound to stumble and fall (Renmin ribao, 2003d)." On various occasions since the crisis, central leaders have emphasized the importance of public health, especially rural health care (Renmin ribao, 2003e,f,g; Ministry of Health, 2003). The government has

also provided more funding to public health. It earmarked billions of dollars to SARS prevention and control, and recently it invested 6.8 billion *yuan* ($US 850 million) for the construction of a three-tiered network of disease control and prevention (Guangming ribao, 2003). While a nationwide SARS training program is underway, the government has initiated an Internet-based disease reporting system which allows local hospitals to directly report suspected SARS cases to the Chinese CDC and the Ministry of Health (Zhongguo xinwen wang, 2003b).

Moreover, as China emerges from the shadow of SARS, Chinese leaders appear to be showing a new, more proactive attitude toward AIDS. Since summer 2003, the government has started offering free treatment for poor people with HIV/AIDS, and it plans to expand the program next year until free treatment is available for all poor HIV carriers and AIDS patients (Chang, 2003; Yardley, 2003). The government has also allocated 11.4 billion *yuan* ($US 1.42 billion) for strengthening the AIDS medical assistance system and training more health personnel for AIDS prevention and treatment (Jiankang bao, 2003). On December 1, Premier Wen Jiabao appeared on state television shaking hands with AIDS patients and called on the nation to treat them with “care and love.” This event was significant because until then, no senior Chinese leader had even discussed the disease in public.

These measures reflected the increased efforts of the Party to cultivate a new image for its leadership. It wants citizens to see the leaders as being in touch with the people and committed to their best interests. More attention has thus been paid to the basic needs of China’s farmers and workers. On August 17, the government promulgated Regulations on the Management of Village Doctors, promising more professional training for rural health personnel (Xinhua news, 2003c). In September, Premier Wen indicated that a majority of the increased health funding will be used to support rural public health. He also reaffirmed his commitment to a new medical insurance scheme in the countryside (Renmin ribao, 2003h). Given that rural areas were viewed as the weakest link in containing the spread of SARS, such measures are expected to strengthen the ability of the public health system to respond to a future disease outbreak.

Equally important, the government seems to have learned that in an era of the Internet and cell phones, a complete information blackout is not only impossible but also counterproductive. There are signs suggesting that the

crisis is forcing the government to take steps to establish an image of a more open and transparent government. For example, an April 28 Politburo meeting obviously made the decision to publicize a submarine accident that same month that cost 70 lives. News of the tragedy was reported by the official Xinhua news agency on May 2. This marks a significant departure from the traditionally secretive approach taken to the nation's military disasters. If this new openness continues in the post-SARS era, it will not only create conditions for a government that is more accountable to its people but might also provide considerable incentives for sharing knowledge of an outbreak with the international community as early as possible.

As evidenced by the government campaign against SARS, an infectious disease can potentially trigger the party-state to organize a political campaign to reach deep into the hinterlands and snap people into action. This government capacity to mobilize against a disease outbreak is enhanced by a more institutionalized crisis management system. The Regulations on Public Health Emergencies issued by the State Council in mid-May, for example, require setting up an emergency headquarters right after a public health emergency is identified. It has also been reported that the government plans to set up an Emergency Response Bureau, which would draw on the example of the U.S. Federal Emergency Management Administration to tackle future health crises and natural disasters (Wiest, 2003).

Problems and Concerns

These changes are worth applauding, but will they suffice to effectively contain future epidemics? Here, one of the major problems is a public health system in China that has been compromised by a lack of sufficient state funding. The portion of total health spending financed by the government has fallen from 34 percent in 1978 to less than 20 percent now (Huang, 2003), and a lack of adequate facilities and medical staff shortages compromised early government efforts to contain SARS. For example, hospitals in Guangdong reportedly faced shortages in hospital beds and ambulances, and even among the 66,000 health care workers in Beijing, less than 3,000 (or 4.3 percent) were familiar with respiratory diseases (Renmin ribao, 2003c). Apart from imposing severe constraints on the government's ability to respond to a public health crisis, the shortage of affordable health care also impacted the ability and willingness of patients to seek out treatment. The *Washington Post* reported a SARS patient who fled quarantine in Beijing because he did not believe that the government would

treat his disease free of charge, and some hospitals are reported to have refused to accept patients who had affordability problems (Washington Post, 2003). More broadly, according to a recent report by the Chinese Consumer's Association, about 50 percent of people who are sick do not see a doctor because of the extremely high out-of-pocket payments (Zhongguo jingji shibao, 2003). All of these factors sow the seeds for a larger and more catastrophic disease attack.

We should also keep in mind that SARS is not the sole microbial threat confronting China. The country faces challenges from other major infectious diseases such as the plague, cholera, HIV/AIDS, other sexually transmitted diseases, tuberculosis, viral hepatitis, and endemic schistosomiasis (Renmin ribao, 2003i). These multiple public health challenges require China to build on the anti-SARS momentum and integrate a comprehensive epidemic control plan into the national socioeconomic development agenda. While the health sector is now receiving increased attention at high levels, the government so far has placed top priority only on preventing the return of SARS. The top leaders have been generally silent on other major infectious diseases. Despite official recognition of the seriousness of HIV/AIDS, China does not have a comprehensive national program for disease prevention and control to help stop the epidemic. In rural areas hard-hit by AIDS, local governments continue to harass public health activists, devote few resources to educating people about the disease, and sometimes even meet the demands of the villagers with violence (Pan, 2003). Furthermore, there has been no fundamental change in the government's development agenda. The central government still equates development with economic growth and uses that as a yardstick in measuring local government performance.

In addition, it is worth noting that the apparent policy transparency has not been accompanied by significant state relaxation of media control. On May 12, the very same day that Premier Wen Jiabao released the new regulations to promote openness, the *Beijing Morning News* carried an article on how people who spread "rumors" about SARS could be jailed for up to 5 years. While the newly promulgated Regulations on Public Health Emergencies stipulate that government officials make timely and truthful reports about any such emergencies, they do not enshrine the public's right to be informed in the same manner. Indeed, a recent speech by Vice Premier Wu Yi reiterated state control over the media in order to "strictly prohibit the spread of rumors and other harmful information (Wu Yi, 2003)."

While feedback from the public may matter more for the government than it used to, government officials ultimately remain responsible not to the public but to the higher authorities. Hence, the government will always be more sensitive to pressure that comes top down, rather than bottom up. Ironically, the likelihood of deception has increased as a result of the spread of some government measures in fighting SARS, such as the practice of holding bureaucratic officials personally accountable for local SARS cases through a "responsibility pledge" (*junling zhuang*) without giving due consideration of actual local conditions (e.g., the public health infrastructure). If indeed an outbreak is imminent, a local government official concerned about his post may well choose to lie. Manipulation of SARS-related data remained a serious problem even after April 17—among other things, a pattern could be easily identified in the government war against SARS in which when upper-level leaders demanded a reduction of SARS cases, their orders would be reflected in statistics afterwards (Wong, 2003).

To the extent that upward accountability and performance-based legitimacy will cause problems in agenda setting and policy making, the lack of effective civil society participation reduces government effectiveness in policy enforcement. In initiating many anti-SARS projects during the crisis, the government did nothing to consult or inform the local people. Chinese non-governmental organizations (NGOs), if anything, were absent in the war against SARS (21st Century Economic Herald, 2003). Instead, the government relied on the extensive array of mobilization vehicles installed in the Mao era—village party branches, street sub-district offices, former barefoot doctors—to take temperatures, quarantine people, trace infections and round up laggards. To be sure, party leaders undertaking the anti-SARS measures differed from their predecessors by emphasizing "science" and "rule by law." Yet the absence of genuinely engaged civil society groups as a source of oversight and information, coupled with the increasing pressure from higher authorities, easily created a results-oriented implementation structure that made nonscientific, heavy-handed measures more appealing to local government officials. They found it safer to be overzealous than to be seen as "soft." Until June 2, for example, Shanghai was quarantining people from the regions hard hit by SARS (such as Beijing) for 10 days even if they had no symptoms (Pomfret, 2003c).

The government's heavy reliance on quarantine during the epidemic also raises a question about the impact of future disease control measures and the worsening of the human rights situation in China. This question, of course, is

not unique to China—even countries like the United States are debating whether it is necessary to apply mandatory approaches to confront health risks more effectively. The Model Emergency Health Powers pushed by the Bush administration would permit state governors in a health crisis to impose quarantines, limit people's movements and ration medicine, and seize anything from dead bodies to private hospitals (Kristof, 2003). While China's Law on Prevention and Treatment of Infectious Disease did not until recently explicate that quarantines apply to the SARS epidemic, Articles 24 and 25 authorize local governments to take emergency measures that may compromise personal freedom. The problem is that unlike democracies, China in applying these measures excludes the input of civil associations. Official reports suggested that innocent people were dubbed rumor spreaders and arrested simply because they relayed some SARS-related information to their friends or colleagues (Xinhua News, 2003d). According to the Ministry of Public Security, public security departments have investigated 107 cases in which people used Internet and cell phones to spread SARS-related "rumors (Renmin wang, 2003d)." Some Chinese legal scholars have already expressed concerns that the government, in order to block information about epidemics, may turn to more human rights violations (ChineseNewsNet, 2003).

The lack of engagement by civil society in the policy process could deplete the social capital that would be so important for future government outbreak control efforts. In the case of SARS, the government's failure to publicize the out-break in a timely and accurate manner and the ensuing rapid policy turnaround eroded the public's trust and contributed to the spread of rumors even after the government adopted a more open stance toward information on the epidemic. In late April, thousands of residents of a rural town of Tianjin ransacked a building, believing it would be used to house ill patients with confirmed or suspected SARS, even though officials insisted that it would be used only as a medical observation facility to accommodate people who had close contacts with SARS patients and for travelers returning from SARS hot spots. Opposition to official efforts to contain SARS was also found in a coastal Zhejiang province, where several thousand people took part in a violent protest against six people being quarantined after returning from Beijing (Kuhn, 2003). Here again, the lack of active civilian participation exacerbated existing problems of trust. In initiating the project in Tianjin, the government had done nothing to consult or inform the local people (Eckholm, 2003).

Finally, the mobilization model for confronting public health crises also suffers from a problem of sustainability in the post-Mao era. By placing great political pressure on local cadres in policy implementation, mobilization is a convenient bureaucratic tool for overriding fiscal constraints and bureaucratic inertia while promoting grassroots cadres to behave in ways that reflect the priorities of their superiors. Direct involvement of the local political leadership increases program resources, helps ensure they are used for program purposes, and mobilizes resources from other systems, including free manpower transferred to program tasks. Yet in doing so, a bias against routine administration is built into its implementation structure. While personal rewards of private life (e.g., medals, higher pay, extra credits for medical workers' children attending the college entrance exam) were provided for activism in the anti-SARS campaign, decades of reforms have eroded state control and increased the opportunity cost of participation. While the government demonstrated in this case a continued ability to spur people to action in even the most remote villages, in a post-totalitarian context it is generally difficult to sustain a state of high alert across the country for an extended period.

Conclusions

The pattern of the Chinese government's response to SARS was shaped by the institutional dynamics of the country's political system. A deeply ingrained authoritarian impulse to maintain secrecy, in conjunction with a performance-based legitimacy and an obsession with development and stability during political succession, contributed to China's initial failure to publicize the outbreak. Meanwhile, an upwardly directed system of accountability, a fragmented bureaucracy, and an oligarchic political structure hampered any effective government response to the outbreak. In spite of these problems, interactions between the state and society unleashed dynamics that prompted the central party-state to intervene on society's behalf. The direct involvement of the Party strengthened authority links, increased program resources, and maximized the potential for interdepartmental and intergovernmental cooperation. In this manner, the party-state remains capable of implementing its will throughout the system without serious institutional constraints. The government's capacity for crisis management has been further enhanced by a series of measures taken in the post-SARS era. However, this does not mean that the government is ready for the next disease outbreak. In the absence of fundamental changes in the

political system and a comprehensive epidemic control plan, not only is the same pattern of cover-up and inaction likely to be repeated, but the government will find it increasingly difficult to control the multiple public health challenges it is now facing.

The above analysis clearly points to a need for the Chinese government to significantly enhance its capacity to combat future outbreaks of SARS and other infectious diseases. Given that a public health crisis reduces state capacity just when ever-increasing capacity is needed to tackle the challenges, purely endogenous solutions to build capacity are unlikely to be successful, and capacity will have to be imported from exogenous sources such as massive foreign aid (Price-Smith, 2002). In this sense, building state capability also means building more effective partnerships and institutions internationally. International actors can play an important role in creating a more responsible and responsive government in China (Huang, 2003). First, aid from international organizations opens an alternative source of financing for health care, increasing the government's financial capacity in the health sector. Second, international aid can strengthen bureaucratic capacity through technical assistance, policy counseling, and personnel training. Third, while international organizations and foreign governments provide additional health resources in policy implementation, the government increasingly has to subject its agenda-setting regime to the donors' organizational goals, which can make the government more responsive to its people. The agenda shift for SARS to a large extent was caused by strong international pressures exerted by the international media, international organizations, and foreign governments. There are also indications that the Internet is increasingly used by the new leadership to solicit policy feedback, collect public opinions, and mobilize political support. Starting February 11, Western news media were aggressively reporting about SARS and about government cover-ups of the number of cases in China. It is very likely that Hu Jintao and Wen Jiabao, both Internet users, made use of international information in making decisions concerning the epidemic. In other words, external pressures can be very influential because Chinese governmental leaders are aware of weaknesses in the existing system for effectively responding to a crisis and therefore have incentives to seek political resources exogenous to the system.

From the perspective of international actors, helping China to fight future epidemics also helps themselves. Against the background of a global economy, diseases originating in China can be spread and transported

globally through trade, travel, and population movements. Moreover, an unsustainable economy or state collapse spawned by poor health will deal a serious blow to the global economy. As foreign companies shift manufacturing to China, the country is becoming a workshop to the world. A world economy that is so dependent on China as an industrial lifeline can become increasingly vulnerable to a major supply disruption caused by disease epidemics. Perhaps equally important, if future epidemics in China result in truly global health crises, the unwanted social and political changes will be felt by even the most powerful nations. As every immigrant or visitor from China or Asia is viewed as a potential Typhoid Mary, minorities and immigration could become a sensitive domestic political issue in countries such as the United States and Canada. An incident in New Jersey during the SARS outbreak, in which artists of Chinese background were denied access to a middle school, suggests that when SARS becomes part of a national lexicon, fear, rumor, suspicion, and misinformation can jeopardize racial harmony in any country (Newman and Zhao, 2003).

Given the international implications of China's public health, it is in the interest of the United States and other industrialized nations to expand cooperation with China in the areas of information exchange, research, personnel training, and improvement of public health facilities. Meanwhile, these countries could send clear signals to the Chinese leadership that reform-minded leaders in the forefront of fighting epidemic diseases and supporting public health will be supported. The world's interests will be well served by continuing to support a Chinese government that is increasingly more open and interested in international engagement. It should also not miss this unique opportunity to help create a healthier China.

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